distribution of individual varieties of the same patterns about their respective typical centres was precisely analogous in its form, say, to that of the Shrimps about theirs, as described in a recent memoir by Mr. Weldon (' Roy. Soc. Proc.,' No. 291, p. 445). It was argued from this, that natural selection has no monopoly of influence either in creating genera or in maintaining their purity.

III. "Preliminary Note on the Transplantation and Growth of Mammalian Ova within a Uterine Foster-Mother." By WALTER HEAPE, M.A., Balfour Student at the University of Cambridge. Communicated by Professor M. FOSTER, Sec. R.S. Received November 12, 1890.

In this preliminary note I wish merely to record an experiment by which it is shown that it is possible to make use of the uterus of one variety of rabbit as a medium for the growth and complete fœtal development of fertilised ova of another variety of rabbit.

Briefly, the experiment made was as follows:—On the 27th April, 1890, two ova were obtained from an Angora doe rabbit which had been fertilised by an Angora buck thirty-two hours previously; the ova were undergoing segmentation, being divided into four segments.

These ova were immediately transferred into the upper end of the fallopian tube of a Belgian hare doe rabbit which had been fertilised three hours before by a buck of the same breed as herself.

It may be well to mention here, I bought this Belgian hare doe some three months before; the man from whom I bought her bred her, and guaranteed her to be a virgin doe of about seven months old. During the time I had her, until the 27th April, she had never been covered by a buck of any breed, being kept *always* isolated from the various bucks in my rabbitry.

In due course this Belgian hare doe gave birth to six young—four of these resembled herself and her mate, while two of them were undoubted Angoras. The Angora young were characterised by the possession of the long silky hair peculiar to the breed, and were true albinoes, like their Angora parents.

As a proof of their parentage, I would add they inherit a habit which nearly all the Angoras I have kept affect—it was marked in their Angora mother and especially pronounced in their father—a habit of slowly swaying their head from side to side as they look at you. I mention this fact because I have never observed the same habit in any breed of rabbits except Angora.

It should be remembered also as a further proof that I put into the Belgian hare doe *two* fertilised ova from the Angora doe, and that *two* Angora young were borne by the former.

Three of the Belgian hare young unfortunately died during the months of September and October, from some undetermined cause (alimentary ?); one of the Belgian hare young—a doe—and the two Angoras—both bucks—survive, and appear fairly strong and hearty.

At the date on which I am writing, 7th November, 1890, the surviving young ones are twenty-three weeks old, having been born on the 29th May, 1890.

All the young at the time of their birth suffered more or less from some skin disease, which, however, disappeared under treatment, and one of the Angora young, who suffered the most from the skin disease, has been remarkably scantily supplied with hair, but this defect is becoming less and less obvious.

Both the Angora young when born were bigger and stronger than any of the other young, and they have all along retained their supremacy in this direction.

I can see no sign in the Angora young of any Belgian hare strain, and the Belgian hare young have not shown any likeness to their foster-brothers. The surviving Belgian hare inherits a white left fore-foot from her father, and one of those which died was similarly marked.

The peculiarities of the Angora young have been already noted.

The experiment described above was undertaken to determine in the first place what effect, if any, a uterine foster-mother would have upon her foster-children, and whether or not the presence and development of foreign ova in the uterus of a mother would affect the offspring of that mother born at the same time.

So far as this single case goes, the evidence is negative.

Before long, I propose to continue my experiments and to extend them.

In concluding this note, I would record my great indebtedness to Mr. Samuel Buckley, M.D. (Lond.), F.R.C.S. (Eng.), of Manchester, who has most kindly given me his valuable assistance in the necessary operative portion of the experiment.

IV. "The Conditions of Chemical Change between Nitric Acid and certain Metals." By V. H. VELEY, M.A., the University Museum, Oxford. Communicated by Professor ODLING, F.R.S. Received October 23, 1890.

(Abstract.)

This paper is in continuation of a preliminary communication on the same subject; the main points contained in it are as follows :—

I. The metals copper, mercury, and bismuth do not dissolve in